

Claims

1. A method of filing a received e-mail message, the method comprising:  
reading a self-describing text-based data structure within the text body of the  
5 received e-mail message;  
comparing the self-describing data structure to a plurality of pre-stored text-based data structures; and  
storing the received data content of the e-mail message or a significant part thereof in a selected data folder to which the received text-based data structure  
10 corresponds,  
the method requiring no external access to data to carry out the reading, comparing and storing steps.
2. A method according to Claim 1, further comprising:  
15 creating a new data folder if the received text-based data structure does not correspond to any of the plurality of pre-stored text-based data structures; and  
the storing step comprises storing the received e-mail message or a significant part thereof in the new data folder.
- 20 3. A method according to Claim 2, further comprising:  
adding the received text-based structure to the plurality of pre-stored text-based data structures; and  
associating the received text-based structure with the new folder.
- 25 4. A method according to any preceding claim, wherein the received text-based data structure comprises a plurality of data sets, and the storing step comprises:  
storing each of the different data sets as a record that can be separately manipulated in the selected folder.
- 30 5. A method according to any preceding claim, wherein the received text-based structure causes an interaction to occur with previously received or existing data.

6. A method according to Claim 5, wherein the storing step comprises overwriting a data set of a text-based data structure previously stored within the folder with a data set of the received text-based data structure.

5 7. A method according to Claim 5 or 6, wherein the received e-mail specifies matching data and certain fields of the data structure, and the interaction comprises:

comparing the matching data for the certain fields of a previously stored data set; and

10 interacting with the data set where the data stored in the certain fields matches the matching data.

8. A method according to Claim 7, wherein the interacting step comprises updating the data set where the data stored in the certain fields matches the matching data.

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9. A method according to Claim 8, wherein the updating step comprises deleting the data set.

10. A method according to Claim 9, wherein the updating step further comprises  
20 inserting the data set provided in the received e-mail in place of the deleted data set.

11. A method according to any of Claims 5 to 10, wherein the storing step comprises overwriting a text-based data structure previously stored within the folder with the received text-based data structure.

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12. A method according to any preceding claim, further comprising:  
using the self-describing data structure to create a new definition for folder;  
and  
applying that new definition to a new folder or existing folder.

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13. A method according to Claim 12, further comprising updating a definition of an existing data folder with the new folder definition if the received text-based data structure does not correspond to any of the plurality of pre-stored text-based data structures and an identifier of the data structure matches that of the existing folder.

14. A method according to any preceding claim, wherein the storing step comprises storing the received data in a database and the method further comprises using database data handling techniques to manipulate at least part of the stored data.

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15. A method according to any of preceding claim, further comprising sorting contents of the selected folder according to a user-selected characteristic.

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16. A method according to any preceding claim, further comprising writing the text-based data structure to a database file external to an e-mail function by which the data structure was received.

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17. A method according to Claim 16, wherein the data structure comprises a processing command for controlling an application which has access to the external database file.

18. A method according to any of Claims 1 to 15, wherein the data structure comprises a processing command for controlling any aspect of the method.

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19. A method according to any preceding claim, wherein at least a portion of the text-based data structure is encoded and the method further comprises decoding the portion of the received text-based data structure before the comparing step.

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20. A method according to Claim 19, wherein the received e-mail message contains an encrypted licence from a sender authenticating the sender.

21. A method according to Claim 20, wherein the encrypted licence comprises the self-describing text-based data structure.

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22. A method according to any preceding claim, further comprising comparing a current date with the date of receipt of a previously filed e-mail, and removing the previously filed e-mail if time between the dates exceeds a predetermined amount.

23. A method according to Claim 22, wherein the received e-mail message comprises an expiry time and the removing step comprises removing the previously filed e-mail if the expiry time has lapsed.

5 24. A method according to Claim 22 or 23, wherein received e-mail comprises a deletion instruction and the comparing and removal steps are carried out on reading of the deletion instruction.

10 25. A method according to any preceding claim, wherein the text-based data structure comprises a data structure written in a command language such as XML.

26. A method according to Claim 25, wherein the text-based data structure comprises an XML schema and the e-mail message further comprises data conforming to the XML schema.

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27. An apparatus for filing a newly received e-mail message, the apparatus comprising:

a store of text-based data structures, each text-based structure corresponding to a particular e-mail folder;

20 reading means for reading a self-describing text-based data structure within the text body of the newly received e-mail message;

a comparator for comparing the received self-describing data structure to each of the plurality of pre-stored text-based data structures; and

25 filing means for filing the received e-mail message in a selected folder to which the received text-based data structure corresponds,

wherein the operation of the apparatus in filing a newly received e-mail requires no external access to data.

30 28. An apparatus according to Claim 27, wherein the reading means, the comparator and the filing means comprise an e-mail management application and a plug-in.

29. A method of a recipient processing a received e-mail to cause data interaction; the method comprising:

reading a text-based data structure within the text body of the received e-mail message;

identifying some pre-stored data of the recipient by use of the data structure; and

5 causing an interaction to occur with the pre-stored data, the interaction being determined by the contents of the received e-mail.

30. A method according to Claim 29, wherein the interaction is determined by the text-based structure.

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31. A method according to Claim 29 or 30, wherein the e-mail comprises a data payload conforming to the data structure and the causing step comprises an interaction between the pre-stored data and the received data payload.

15 32. A method according to Claim 31, wherein the interaction comprises overwriting the prestored data with the payload data.

33. A method according to any of Claims 29 to 32, wherein the interaction comprises deleting the pre-stored data.

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34. An apparatus for processing a received e-mail to cause data interaction; the apparatus comprising:

reading means for reading a text-based data structure within the text body of the received e-mail message;

25 identifying means for identifying some pre-stored data of the recipient by use of the data structure; and

interaction means for causing an interaction to occur with the pre-stored data, the interaction means being arranged to be controlled by the contents of the received e-mail.

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35. A method of updating a remote data structure or process, the method comprising:

reading a text-based processing instruction within the text body of a received e-mail message;

accessing pre-stored data relating to the remote data structure or process;  
updating the pre-stored data in accordance with the text-based processing instruction to effect control.

5 36. A method according to Claim 35, wherein the updating step comprises updating a sender-defined database on a recipient's computer.

37. A method according to Claim 35, wherein the updating step comprises updating a functional capability of a recipient's program;

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38. A method according to Claim 35, wherein the updating step comprises updating the executable code of a program provided at the recipient.

15 39. A method according to Claim 35, wherein the updating step comprises issuing commands to a program provided at the recipient.

40. A method according to Claim 35, wherein the updating step comprises issuing commands indirectly to other programs.

20 41. A system for updating a remote data structure or process, the system comprising:

reading means for reading a text-based processing instruction within the text body of a received e-mail message;

25 accessing means for accessing pre-stored data relating to the remote data structure or process; and

updating means for updating the pre-stored data in accordance with the text-based processing instruction to effect control.

30 42. A method of filing content of a received instant messaging communication, the method comprising:

reading a self-describing text-based data structure within the text body of the received instant messaging communication;

comparing the self-describing data structure to a plurality of pre-stored text-based data structures; and

storing the received data content of the instant messaging communication or a significant part thereof in a selected data folder to which the received text-based data structure corresponds,

the method requiring no external access to data to carry out the reading, comparing and storing steps.

43. A method of updating a remote data structure or process, the method comprising:

reading a text-based processing instruction within the text body of a received instant messaging communication;

accessing pre-stored data relating to the remote data structure or process; and

updating the pre-stored data in accordance with the text-based processing instruction to effect control.

44. A method of a recipient processing a received instant messaging communication to cause data interaction; the method comprising:

reading a text-based data structure within the text body of the received instant messaging communication;

identifying some pre-stored data of the recipient by use of the data structure;

and

causing an interaction to occur with the pre-stored data, the interaction being determined by the contents of the received instant messaging communication.